

What is claimed is:

1. An oscillator circuit for generating signals with a predetermined oscillator frequency, the oscillator circuit comprising:

at least one resonator; and,

5 at least one load impedance connected to the resonator, the load impedance having at least one structure which may be machined by means of high-energy radiation to trim the resonant characteristics of the oscillator circuit.

2. The oscillator circuit according to claim 1, wherein the high-energy radiation is laser radiation.

10 3. The oscillator circuit according to claim 1, wherein the load impedance comprises a capacitor, having a capacitance which may be varied by machining.

4. The oscillator circuit according to claim 3, wherein the capacitor comprises a monolithic base member of a dielectric material and at least one electrode arranged on an externally accessible surface of the base member, such that the capacitance may be
15 reduced by removing at least part of the electrode.

5. The oscillator circuit according to claim 4, wherein the load impedance is a surface-mountable component.

6. The oscillator circuit according to one of claims 5 wherein the resonator is a stripline.

20 7. The oscillator circuit according to claim 6 wherein the stripline comprises a looped structure and the load impedance is electrically connected with a central area of the stripline.

8. A method of trimming the resonant characteristics of an oscillator, comprising the steps of:

determining the resonant characteristics of an oscillator with at least one resonator and at least one load impedance;

5 comparing the determined resonant characteristics with predetermined nominal characteristics;

generating a control signal as a function of the result of the comparison and output of the control signal to a machining device; and

machining the load impedance as a function of the control signal.

10 9. The method according to claim 8, wherein the machining unit comprises a laser.

10. The method according to claim 8, wherein the step of machining the load impedance as a function of the control signal comprises removal of at least part of an electrode of a capacitor.

15 11. A semiconductor circuit having an oscillator unit for generating signals with a predetermined oscillator frequency, the oscillator unit having at least one resonator and comprising:

a load impedance having at least one electrically conductive structure which may be machined by means of high-energy radiation to trim the resonant characteristics of the
20 oscillator circuit.